AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A transdermal drug delivery system comprising a blend of:

(a) one or more polymers; and

(b) a therapeutically effective amount of one or more drugs, at least one of which is a low molecular weight drug with a molecular weight of less than about 300 daltons and is liquid at or about room temperatures,

wherein said system is substantially free of water and liquids having a boiling point (i) below processing temperatures and (ii) equal to or greater than the normal boiling points of the at least one low molecular weight drug; and,

wherein at least one of said one or more polymers is a high shear resistant acrylic-based pressure-sensitive adhesive polymer having a shear resistance which is greater than or equal to 50 hours at 8 pounds per square inch and 72° Fahrenheit.

2. (Previously Presented) A pressure-sensitive adhesive transdermal drug delivery system suitable for transdermal drug delivery comprising a blend of:

(a) one or more solvent-based high shear resistant acrylic-based polymers having a shear resistance which is greater than or equal to 50 hours at 8 pounds per square inch and 72° Fahrenheit; and

(b) a therapeutically effective amount of one or more drugs, at least one of which is a low molecular weight drug with a molecular weight of less than about 300 daltons and is liquid at or about room temperatures, wherein the transdermal drug delivery system forms a polymer matrix which has sufficient tack and shear to remain in place under conditions of use.

3. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 2, wherein the one or more high shear resistant acrylic-based polymers have a shear resistance which is greater than or equal to 100 hours at 4 pounds per square inch and 72° Fahrenheit.

4. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 3, wherein the one or more high shear resistant acrylic-based polymers have a shear resistance which is greater than or equal to 100 hours at 8 pounds per square inch and 72° Fahrenheit.

5. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 2, wherein the system is substantially free of water and liquids having a normal boiling point below processing temperatures and also about equal to or greater than the normal boiling points of the one or more low molecular weight drugs.

6. (Previously Presented) A pressure-sensitive transdermal drug delivery system as claimed in claim 2, wherein the one or more drugs are present in a range of 1 to 40 weight percent, based on the dry weight of the total transdermal system.

7. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 2, wherein the one or more high shear resistant acrylic-based polymers have a weight average molecular weight in the range of about 600,000 to about 1,000,000 daltons.

8. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 7, wherein the one or more high shear resistant acrylic-based polymers have a weight average molecular weight in the range of about 700,000 to about 900,000 daltons.

9. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 8, wherein the one or more high shear resistant acrylic-based polymers have a weight average molecular weight in the range of about 750,000 to about 850,000 daltons.

10. (Original) A pressure-sensitive transdermal drug delivery system for transdermal drug delivery as claimed in claim 2, wherein the one or more drugs comprise nicotine.

11. (Original) A pressure sensitive transdermal drug delivery system as claimed in claim 10, wherein said nicotine is present in its free-base or free-acid form.

12. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 2, wherein the one or more acrylic-based polymers comprise a pressure-sensitive adhesive.

13. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 12, wherein the one or more high shear resistant, acrylic-based polymers are present in the system in a range of about 10-90 weight per cent, based on the dry weight of the total transdermal system.

14. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 2 further comprising a backing material superimposed on one surface of the blend, the backing material being substantially impermeable to the drug contained therein.

15. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 14 further comprising a release liner superimposed on a surface of the blend opposite the backing material.

16. (Original) A pressure-sensitive transdermal drug delivery system as claimed in claim 2, wherein the system further comprises an additive selected from one or more of a filler, an enhancer and an excipient.

17. (Previously Presented) A method of producing a pressure-sensitive transdermal drug delivery system suitable for a transdermal drug delivery system, comprising the steps of:

(1) producing a blend of:

(a) one or more solvent-based high shear resistant acrylic-based polymers having a shear resistance of greater than or equal to 50 hours at 8 pounds per square inch and 72° Fahrenheit and mixtures thereof; and

(b) a therapeutically effective amount of one or more drugs, at least one of which is a low molecular weight drug with a molecular weight of less than about 300 daltons and is liquid at or about room temperatures, wherein the blend is in a solvent system;

(2) forming the blend into a polymer matrix; and

(3) drying the polymer matrix to remove the solvent system to form the transdermal drug delivery system, wherein the system forms a polymer matrix which has sufficient tack and shear for application to a human being.

18. (Original) A method as claimed in claim 17, wherein the high shear resistant polymer comprises a high molecular weight pressure-sensitive acrylic-based polymer.

19. (Previously Presented) A pressure-sensitive adhesive transdermal drug delivery system suitable for transdermal drug delivery comprising a blend of:

(a) a pressure-sensitive adhesive polymer which consists of one or more solvent-based high shear resistant acrylic-based polymers having a shear resistance which is greater than or equal to 50 hours at 4 pounds per square inch and 72° Fahrenheit; and

(b) a therapeutically effective amount of one or more drugs, at least one of which is a low molecular weight drug with a molecular weight of less than about 300 daltons and is liquid at or about room temperatures, wherein the transdermal drug delivery system forms a polymer matrix which has sufficient tack and shear to remain in place under conditions of use.

20. (Original) A pressure-sensitive adhesive transdermal drug delivery system as claimed in claim 19, wherein the one or more solvent-based high shear resistant acrylic-based polymers have a shear resistance which is greater than or equal to 50 hours at 8 pounds per square inch and 72° Fahrenheit.

21. (Previously Presented) A method of producing a pressure-sensitive transdermal drug delivery system suitable for a transdermal drug delivery system, comprising the steps of:

(1) producing a blend of:

(a) a pressure-sensitive adhesive polymer which consists of one or more solvent-based high shear resistant acrylic-based polymers having a shear resistance of greater than or equal to 50 hours at 4 pounds per square inch and 72° Fahrenheit and mixtures thereof; and

(b) a therapeutically effective amount of one or more drugs, at least one of which is a low molecular weight drug with a molecular weight of less than about 300 daltons and is liquid at or about room temperatures, wherein the blend is in a solvent system;

(2) forming the blend into a polymer matrix; and

(3) drying the polymer matrix to remove the solvent system to form the transdermal drug delivery system, wherein the system forms a polymer matrix which has sufficient tack and shear for application to a human being.

22. (Previously Presented) A method of producing a pressure-sensitive transdermal drug delivery system suitable for a transdermal drug delivery system, comprising the steps of:

(1) producing a blend of:

(a) one or more polymers, wherein at least one of said one or more polymers is a solvent-based high shear resistant acrylic-based pressure-sensitive adhesive polymer; and

(b) a therapeutically effective amount of one or more drugs, at least one of which is a low molecular weight drug with a molecular weight of less than about 300 daltons and is liquid at or about room temperatures, wherein the blend is in a solvent system;

(2) forming the blend into a polymer matrix; and

(3) drying the polymer matrix to remove the solvent system to form the transdermal drug delivery system, wherein the system forms a polymer matrix which has sufficient tack and shear for application to a human being.

23. (Previously Presented) A pressure-sensitive transdermal drug delivery system for transdermal drug delivery as claimed in claim 2, wherein the one or more drugs comprise amphetamine.

24. (New) A pressure-sensitive transdermal drug delivery system for transdermal drug delivery as claimed in claim 1, wherein the one or more drugs comprise nicotine.

25. (New) A pressure sensitive transdermal drug delivery system as claimed in claim 24, wherein said nicotine is present in its free-base or free-acid form.

26. (New) A pressure-sensitive transdermal drug delivery system for transdermal drug delivery as claimed in claim 1, wherein the one or more drugs comprise amphetamine.